

Applicant : William Harold Jay
Serial No. : 09/509,301
Filed : March 23, 2000
Page : 2

Attorney's Docket No.: 11750-
002001 / 2274032/PO9462/97-MJC

A2
cont.

are recommended for the manufacture of absorbent articles, especially disposable absorbent articles, such as nappies, sanitary napkins, bedpads, incontinent pads, and the like. --

Amend the paragraph beginning at page 4, line 19 as follows:

-- The ion exchange medium may be any convenient ion exchange medium suitable for

A3 sorbbing the desired metal ions from the solution and/or slurry. The ion exchange medium may be in the form of a bead, resin, fibre, foam, or liquid. --

Amend the paragraph beginning at page 6, line 29 as follows:

-- A commercially available MDI compound with especially desirable properties is Isonate 143L which is produced by reacting MDI to form the carbodiimide and this material in turn reacts to form a tri-functional cycloadduct. The mixture of MDI, the carbodiimide and the cycloadduct are in equilibrium. The mixture contains a major amount of pure diphenylmethane diisocyanate and minor amounts of carbodiimides and trifunctional cycloadducts of diphenylmethane diisocyanate. As described, the term derivatives of diphenylmethane diisocyanate mean products that have been made from MDI as a starting material. It includes adducts dimmers, and trimers. --

A4

Amend the paragraph beginning at page 8, line 11 as follows:

-- Superabsorbant microcellular resins and foams differ from polyurethane foams in that they are normally produced by the reaction of a suitably formulated isocyanate terminated polymer with a very significant excess of water. The polyol portion of the polymer is generally based upon poly(oxyethylene) glycol, and the isocyanate component is generally TDI, MDI or MDI-based isocyanate or mixtures of both isocyanates. --

A5

Amend the paragraph beginning at page 9, line 11 as follows:

-- Thermal reticulation may be advantageously conducted whereby the windows or membranes are removed from individual cells or bubbles which make up the foam structure.

A6

Reticulation results in a foam preferably having at least 95% of open cells and most preferably 99% open cells. Thermal reticulation of polyurethane foam is a known procedure to those

Applicant : William Harold Jay
Serial No. : 09/509,301
Filed : March 23, 2000
Page : 3

Attorney's Docket No.: 11750-
002001 / 2274032/PO9462/97-MJC

A6
cont.
skilled in the art and as disclosed for example in U.S Patent Nos. 3,171,820 and 3,875,025 and 3,175,030. Reticulation is achieved by providing a combustible mixture of an oxidizer material and an oxidisable material within whereupon the cell windows or membranes are destroyed. It is also possible to swell the polyurethane foams in an organic solvent to increase the cell size. --

Amend the paragraph beginning at page 13, line 10 as follows:

A7
-- Other methods for the preparation or application of these polymers are typically described in US Patent Nos. 3,793,241; 3,845,535; 3,861,993; 3,890,254; 3,900,030; 3,903,232; 3,904,557; 4,110,508; 4,127,516; 4,137,200; 4,158,087; 4,160,076; 4,181,770; 4,226,043; 4,292,412; 4,314,034; 4,365,025; 4,337,645; 4,384,050; 4,384,051; 4,717,738; 4,725,628; 4,731,391; 4,740,528; 4,789,720; 4,798,876; 4,828,542; 5,065,752; 5,296,518; 5,591,779; and 5,624,971 incorporated herein by reference. --

Amend the paragraph beginning at page 13, line 22 as follows:

A8
-- Advantageously the ability to incorporate large volumes of water into formulation provides an opportunity to incorporate water-based polymer emulsions directly into the polymer. This cannot generally be achieved by the application of conventional polyurethane foams. Water-based polymers eliminate the requirement for solvents in the polymer preparation and therefore eliminate the need to remove and capture environmentally undesirable solvents. Typically, such emulsions may be water-based emulsion resulting from the reaction of vinylidene diphosphonic acid with polyurethane foam, offer exceptional selectivity for Fe(III) in the presence of Cu(II) in acid solutions commonly encountered in copper electrowinning tankhouse beel streams. --

Amend the paragraph beginning at page 15, line 5 as follows:

A9
-- The polymer produced was used to remove gold cyanide and copper cyanide from aqueous solutions and slurries. --